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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Research was performed to develop tank gunnery sustainment training materials for M60A3 armor crewmembers. This research product consists of 6 booklets for use by tank commanders in maintaining their knowledge and skill in issuing basic fire commands. The first booklet (RP 83-01A) provides an overview of fire command knowledges and contains training notes. The remaining five booklets provide practice in: classifying threats (RP 83-01B); selecting ammo/weapons (RP 83-01C); sequencing fire command elements (RP 83-01D); issuing fire commands for single engagements (RP 83-01E); and issuing fire commands for multiple and (continued)		

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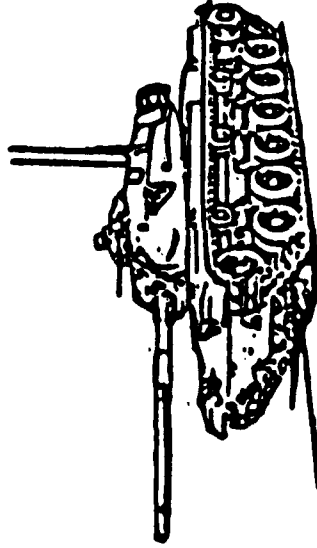
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FIRE COMMANDS FOR THE M60A3 TANK

BOOKLET 2

CLASSIFYING THREATS

AD-A164 673



**U.S. ARMY RESEARCH INSTITUTE
FOR THE BEHAVIORAL AND SOCIAL SCIENCES**

**RESEARCH PRODUCT
RP 83-1-B**

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HOW TO USE THIS BOOKLET

1. Look at the scenario picture.
2. Read the written description.
3. Read the question following the description.

SOME QUESTIONS ARE FOLLOWED BY A LIST OF POSSIBLE ANSWERS. FOR THESE QUESTIONS, YOU SHOULD SELECT THE CORRECT ANSWER.

4. Check your answer with the Answer Key on the page following the scenario.
5. Refer to:
 - FM-17-12-3if you have any further questions.

BEFORE YOU USE THIS BOOKLET

Before you use this booklet, be sure you have completed booklet 1 of this set.

TANK COMMANDER TRAINING NOTES

Training notes are presented in booklet 1.

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BOOKLET NUMBER 2

CLASSIFICATION OF THREATS

USER'S GUIDE

This is booklet number 2 in a set of six booklets. The set deals with issuing fire commands on the M60A3 tank. When you have finished the complete set you will be able to:

ISSUE A CORRECT FIRE COMMAND FOR THE MAIN
GUN OR ANY MACHINEGUN IN EITHER SINGLE,
MULTIPLE OR SIMULTANEOUS TARGET ENGAGEMENTS.

BACKGROUND

In order to construct and issue the correct fire command, you must be able to classify targets on the battlefield. They are classified according to their threat. The classification will help you decide which target to engage.

THIS BOOKLET

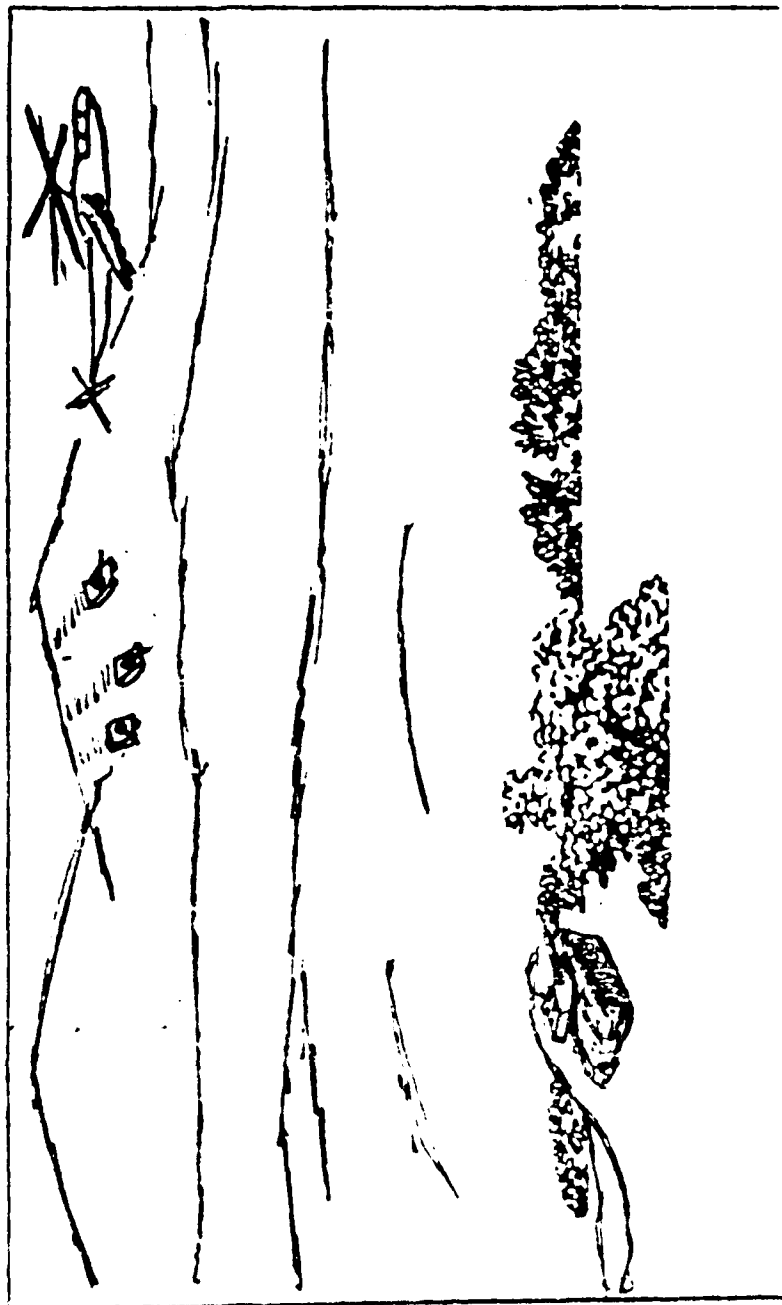
This booklet will give you practice in classifying threats according to:

- MOST DANGEROUS THREAT
- DANGEROUS THREAT
- LEAST DANGEROUS THREAT

The booklet contains battlefield scenarios. Each scenario includes:

- A picture of the battlefield.
- A short written description of the battlefield situation.
- A question for you to answer.

SCENARIO 1



THE SITUATION

- You are turret down in a well protected defensive position.
- Primary target is enemy armor.
- SABOT is loaded as battlesight ammunition.
- M60A3 is fully operational.
- A platoon of T-72 tanks is detected advancing toward you at a range of 1800 to 2000 meters.
- They do not see you.
- A HIND-D helicopter mounting SAGGERS is on the right at a range in excess of 3000 meters.
- He does not see you.

What is (are) the most dangerous threat(s) in this situation?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
The center T-72	The left T-72	The right T-72	The chopper	None of the targets

SCENARIO 1 ANSWER

The correct answer is E: NONE of the targets.

In order to be MOST DANGEROUS a target must:

- BE ABLE TO KILL YOU
- HAVE SEEN YOU
- BE PREPARING TO ENGAGE YOU

A.

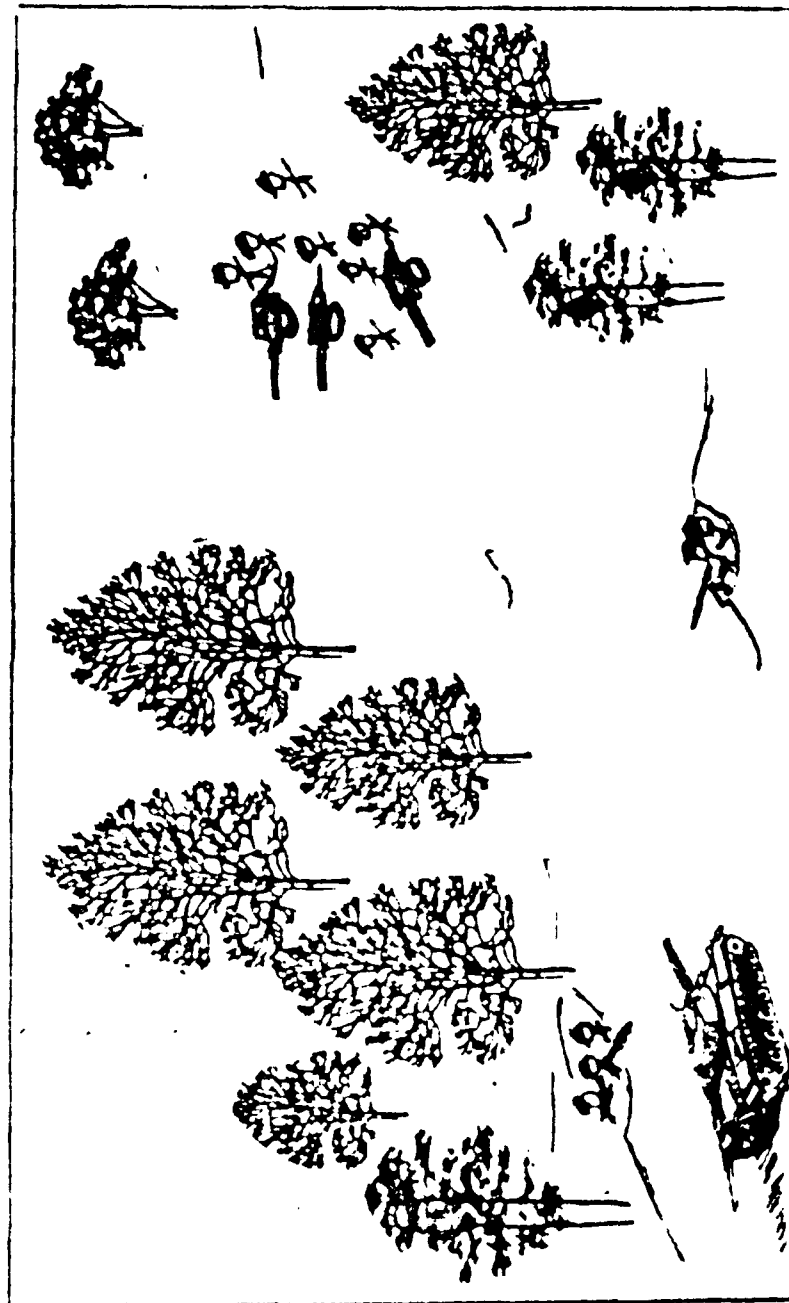
B.

C.

D.

The target has not seen you and is not
preparing to engage you.

SCENARIO 2



THE SITUATION

- You are in a deliberate attack, moving through woods.
- You have penetrated the enemy's security zone and forward defensive positions. You are now into his main belt.
- M60A3 is fully operational
- General purpose machine guns (7.62 mm) in foxholes are on your left and right at about 500 meters.
- Machine guns have started firing at you.
- Three T-12A anti-tank guns are direct front at about 1000 meters. One T-12A brings the gun to aim at you.

What is (are) the MOST DANGEROUS threat(s) in this situation?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
The left MC firing at you	The right MC firing at you	The T-12A that is aiming at you	All of the targets

SCENARIO 2 ANSWER

You should have selected C: The T-12A that is aiming
at you

The T-12A aiming at you is the MOST DANGEROUS threat
because:

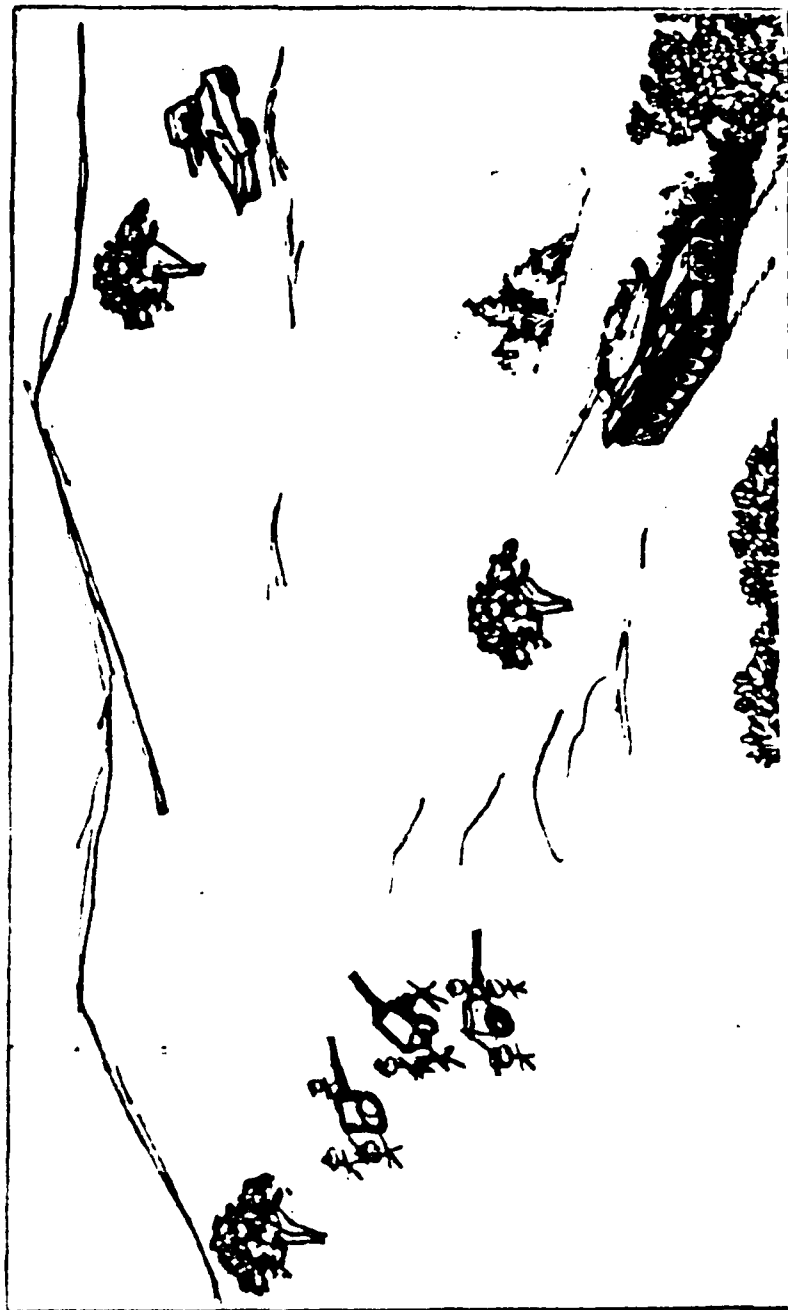
- HE CAN KILL YOU
- HE HAS SEEN YOU
- HE IS PREPARING TO ENGAGE YOU

WRONG ANSWERS

A. } The machine guns cannot kill you.
B. }

D. The machine guns cannot kill you and the other T-12's have not seen you yet.

SCENARIO 3



THE SITUATION

- You are in a hasty defensive position.
- You are not well concealed
- M60A3 is fully operational.
- SABOT is the battlesight ammunition.
- A BRDM mounting SAGGER is on the right at 1500 meters. He has stopped and looks like he is preparing to fire at you.
- There are three SPC-9 (Recoilless gun) teams to your left at 2000 meters. One has seen you and is setting up to fire.

Which target(s) is (are) the MOST DANGEROUS threat(s)?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
All are MOST DANGEROUS	The SPC-9 that has seen you is MOST DANGEROUS	The SPC-9 and BDRM are <u>both</u> MOST DANGEROUS	The BDRM is MOST DANGEROUS

SCENARIO 3 ANSWER

The correct answer is D: The BRDM is
MOST DANGEROUS

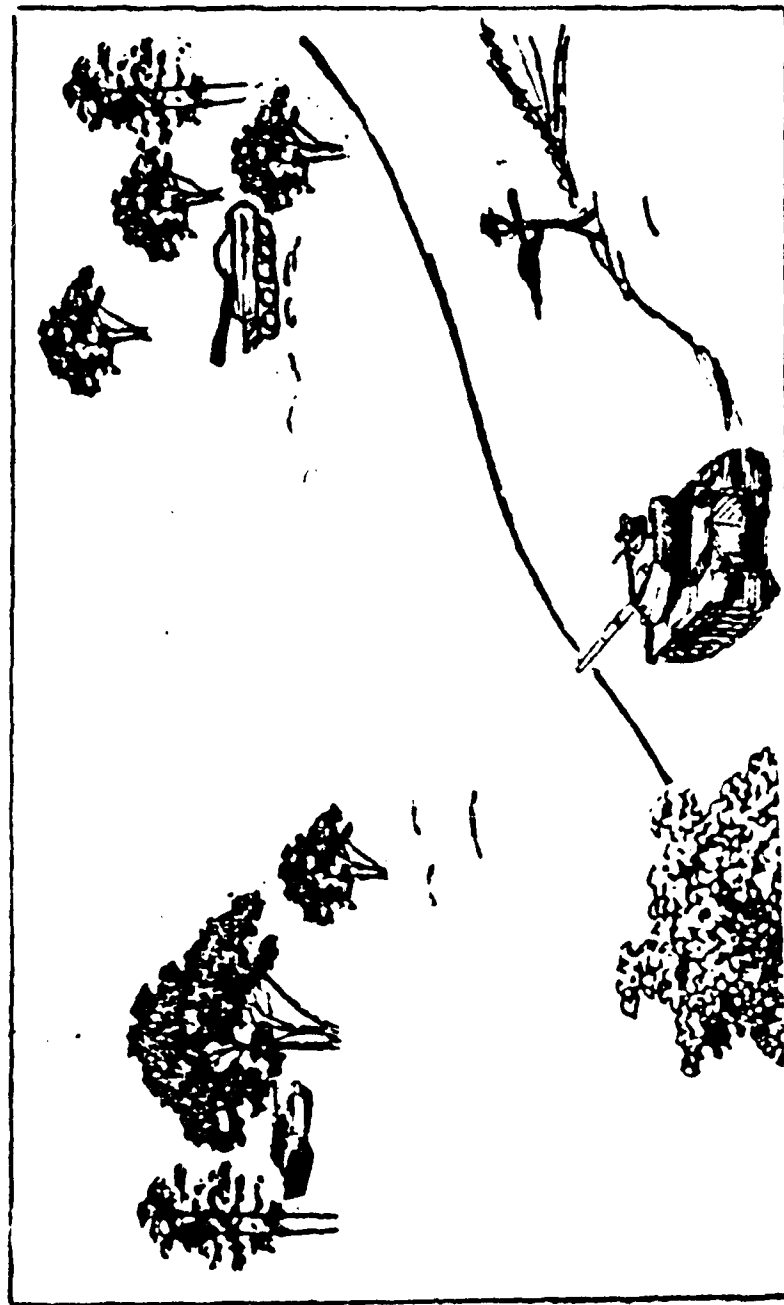
The BRDM is MOST DANGEROUS because:

- HE CAN KILL YOU
- HE HAS SEEN YOU
- HE IS PREPARING TO ENGAGE YOU

WRONG ANSWERS

- A. Not all of the targets are MOST DANGEROUS.
- B. The SPC-9 is beyond its effective range.
- C. The SPC-9 is not MOST DANGEROUS.

SCENARIO 4



THE SITUATION

- You are in a traveling overwatch.
- Your mission is to destroy enemy armor.
- SABOT is loaded as battlesight ammunition.
- An RPG appears to your right, at 300 meters, and is aiming at you.
- An SP-122 (self-propelled howitzer) is giving indirect fire. He is about 2500 meters in front of you but does not see you.
- A T-72 comes out of the woods to your left about 1200 meters away. He is aiming at you.

Which target(s) is (are) MOST DANGEROUS?

A B C D E

The RPG The T-72 The RPG The RPG All the
 and T-72 and SP-122 targets

SCENARIO 4 ANSWER

The correct answer is C. The RPG and T-72.

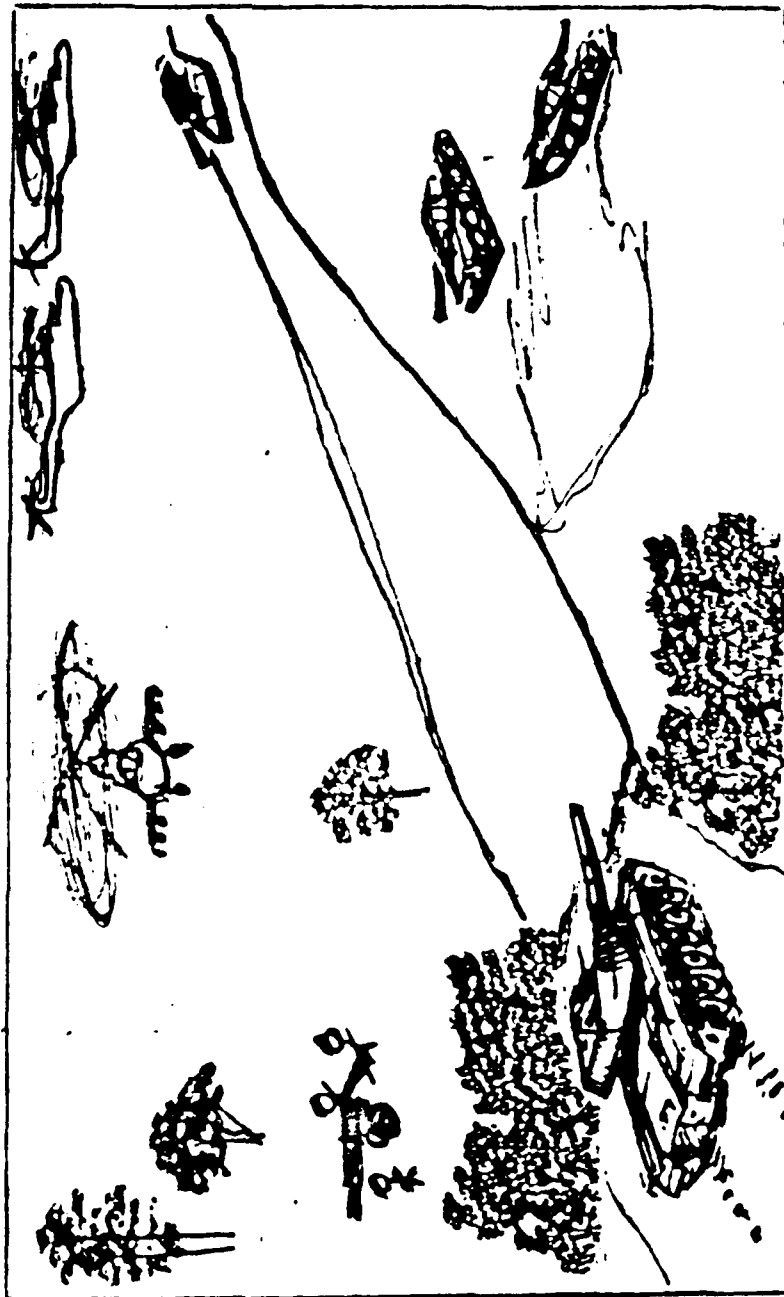
The RPG and the T-72 are the MOST DANGEROUS threats because:

- THEY BOTH CAN KILL YOU
- THEY BOTH SEE YOU
- THEY BOTH ARE PREPARING TO ENGAGE YOU

WRONG ANSWERS

- A. The RPG is not the only MOST DANGEROUS THREAT.
- B. The T-72 is not the only MOST DANGEROUS THREAT.
- D. { The SP-122 is not a MOST DANGEROUS THREAT. He
does not see you.
- E.

SCENARIO 5



THE SITUATION

- You are in a well protected defensive position.
- Your sector is under heavy attack.
- An SPC-9 is detected on your left at 750 meters and does not see you.
- A HIP-E (helicopter) mounting SWATTER antitank guided missile is hovering 1000 meters away and aims at you.
- Two MI-10 heavy lift choppers, retreating in the distance, have dropped ASU-85 assault vehicles. The closest ASU-85, at 1500 meters, is aimed at you.
- A T-72 at 4000 meters is approaching.

Which targets are MOST DANGEROUS threats?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
The SPC-9 and M-10 chopper	The HIP-E chopper and closest ASU-85	The T-72 and HIP-E chopper	The SPC-9 and the closest ASU-85

SCENARIO 5 ANSWER

The correct answer is B: The HIP-E chopper and closest ASU-85.

These targets are the MOST DANGEROUS threats because they:

- THEY BOTH CAN KILL YOU
- THEY BOTH SEE YOU
- THEY BOTH ARE PREPARING TO ENGAGE YOU

WRONG ANSWERS

- A. The SPG-9 has not seen you and the MI-10 chopper cannot kill you.
- C. The T-72 is too far away to engage you.
- D. The SPG-9 has not seen you.

SCENARIO 6



THE SITUATION

- M60A3 is fully operational in a hasty defense.
- Enemy troops and assault equipment are air-dropped.
- Two RPG teams are directly in front, about 500 meters.
- One of them is aimed at you.
- A man pack SAGGER team, about 800 meters away, is behind the RPG's and seems to have seen you.
- An ASU-85 assault gun, about 2500 meters away, is moving to your right.
- An MI-6 heavy lift helicopter is flying away to the right.

What are the MOST DANGEROUS threats in this situation?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
RPG team 2 and the ASU-85	RPG team 1 and the M-6	The SAGGER and ASU-85	RPG team 1 and the SAGGER

SCENARIO 6 ANSWER

The correct answer is D: RPG team 1 and the SAGGER

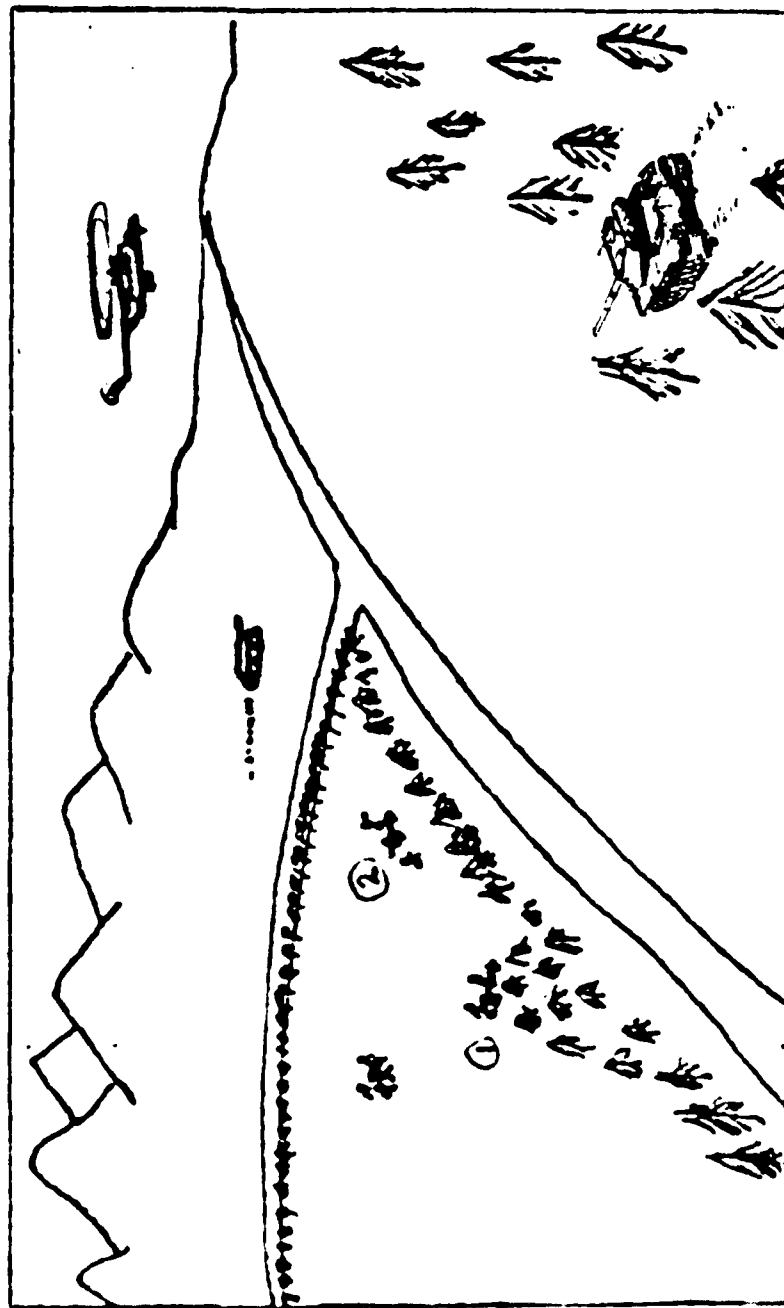
Both of these targets are MOST DANGEROUS because:

- THEY BOTH CAN KILL YOU
- THEY BOTH SEE YOU
- THEY BOTH ARE PREPARING TO ENGAGE YOU

WRONG ANSWERS

- A. RPG team 2 is not ready to engage you and the ASU-85 is moving, so it cannot engage you.
- B. The MI-6 cannot kill you.
- C. The ASU-85 cannot engage you when it is moving

SCENARIO 7



THE SITUATION (same as before)

- M60A3 is fully operational in a hasty defense.
- Enemy troops and assault equipment are air-dropped.
- Two RPG teams are directly in front, about 500 meters.
- Team 1 is aimed at you.
- A man pack SAGGER team, about 800 meters away, is behind the RPGs. They are ready to launch.
- An ASU-85 assault gun, about 2500 meters away, is moving to your right.
- An MI-6 heavy lift helicopter is flying away to the right.

What are the DANGEROUS threats in this situation?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
RCP team 1	RPG team 2	ASU-85 and	RPG team 2
and the	and the	and the	and the
SAGGER	ASU-85	MI-6	MI-6

SCENARIO 7 ANSWER

The correct answer is B: RPG team 2 and the ASU-85

They are the DANGEROUS threats because:

- THEY BOTH CAN KILL YOU
- HAVE NOT SEEN YOU, OR
- THEY ARE NOT PREPARING TO ENGAGE YOU

WRONG ANSWERS

A. These targets are MOST DANGEROUS because they can kill you, they see you, and they are ready to engage you.

C. } The MI-6 is not a DANGEROUS threat
D. } because he cannot kill you.

SCENARIO 8



THE SITUATION (same as before)

- M60A3 is fully operational in a hasty defense.
- Enemy troops and assault equipment are air-dropped.
- There are two RPC teams directly in front, about 500 meters. Team 1 is aimed at you.
- A man pack SAGGER team, about 800 meters away, is behind the RPCs. They are ready to launch.
- An ASU-85 assault gun, about 2500 meters away, is moving to your right.
- An MI-6 heavy lift helicopter is flying away to the right.

Which target(s) is (are) the LEAST DANGEROUS threat in this situation?

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
RPC team 1	RPC team 1	SAGGER	ASU-85 and	MI-6
	and RPC		RPC team 2	
	team 2			

SCENARIO 8 ANSWER

You should have selected E: MI-6

The MI-6 heavy lift helicopter is the only
LEAST DANGEROUS threat because:

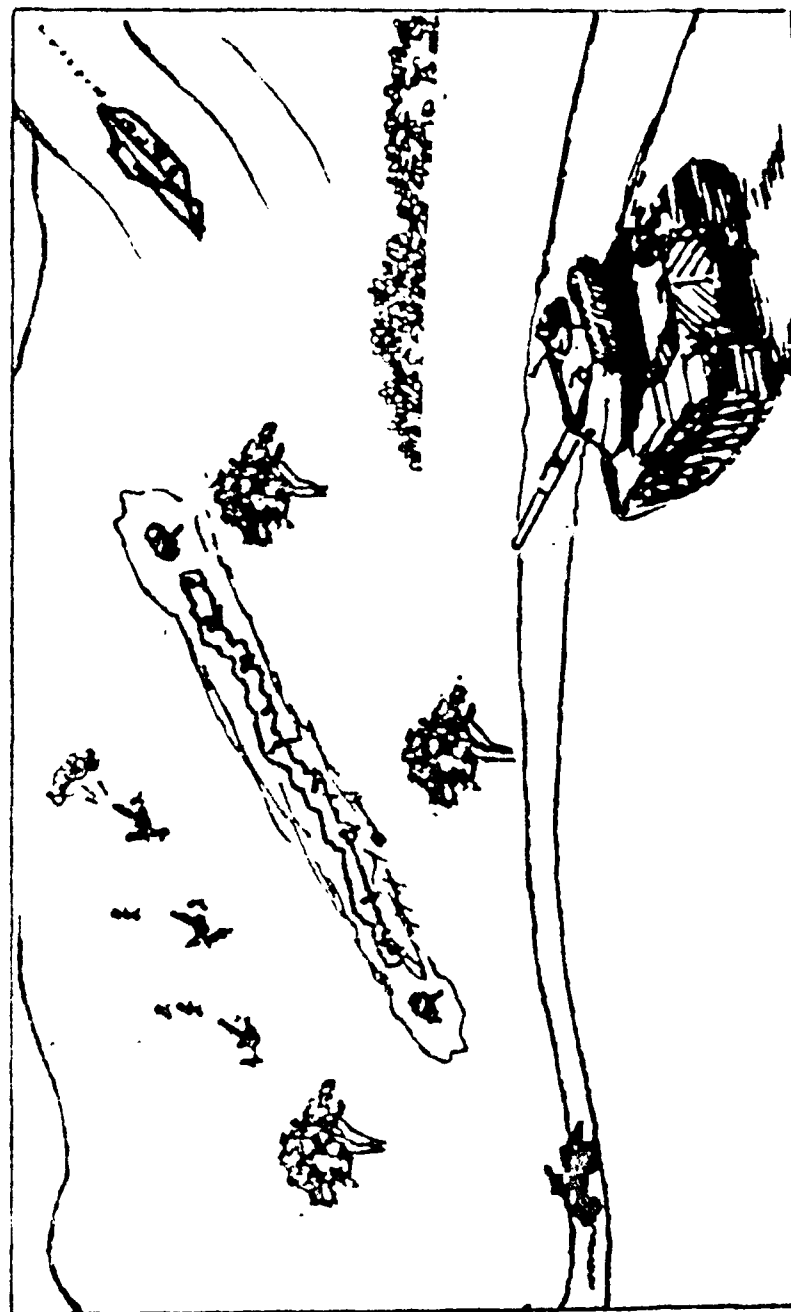
- IT CANNOT KILL YOU, BUT
- CAN OBSERVE AND REPORT YOUR POSITION

WRONG ANSWERS

A. }
B. }
C. }
D. }

These threats are not LEAST
DANGEROUS because they can kill
you.

SCENARIO 9



THE SITUATION

- You have just entered the enemy's security zone in a deliberate attack.
- To your left, at a range of 1000 meters, you see a BRDM mounting SAGGERS. He is moving and not aimed at you.
- Direct front at 1500 meters are dug in troops. Troops are flanked by machine gun positions. Troops see you but do not fire.
- 152mm howitzers, at 3500 meters, is giving indirect fire.
- To your right, at 1200 meters is a PT-76. He has stopped and is aiming at you.

In this situation, which target(s) is (are):

MOS'1 DANGEROUS?
DANGEROUS?
LEAST DANGEROUS?

(Sorry, no choices are given. You will have to figure out this one.)

SCENARIO 9 ANSWER

Your answers should have been:

MOST DANGEROUS

- PT-76

DANGEROUS

- BRDM
- 152mm howitzers

LEAST DANGEROUS

- Troops
- Machine guns

The PT-76 is the MOST DANGEROUS threat because it:

- Can kill you
- Has seen you
- Is preparing to engage you

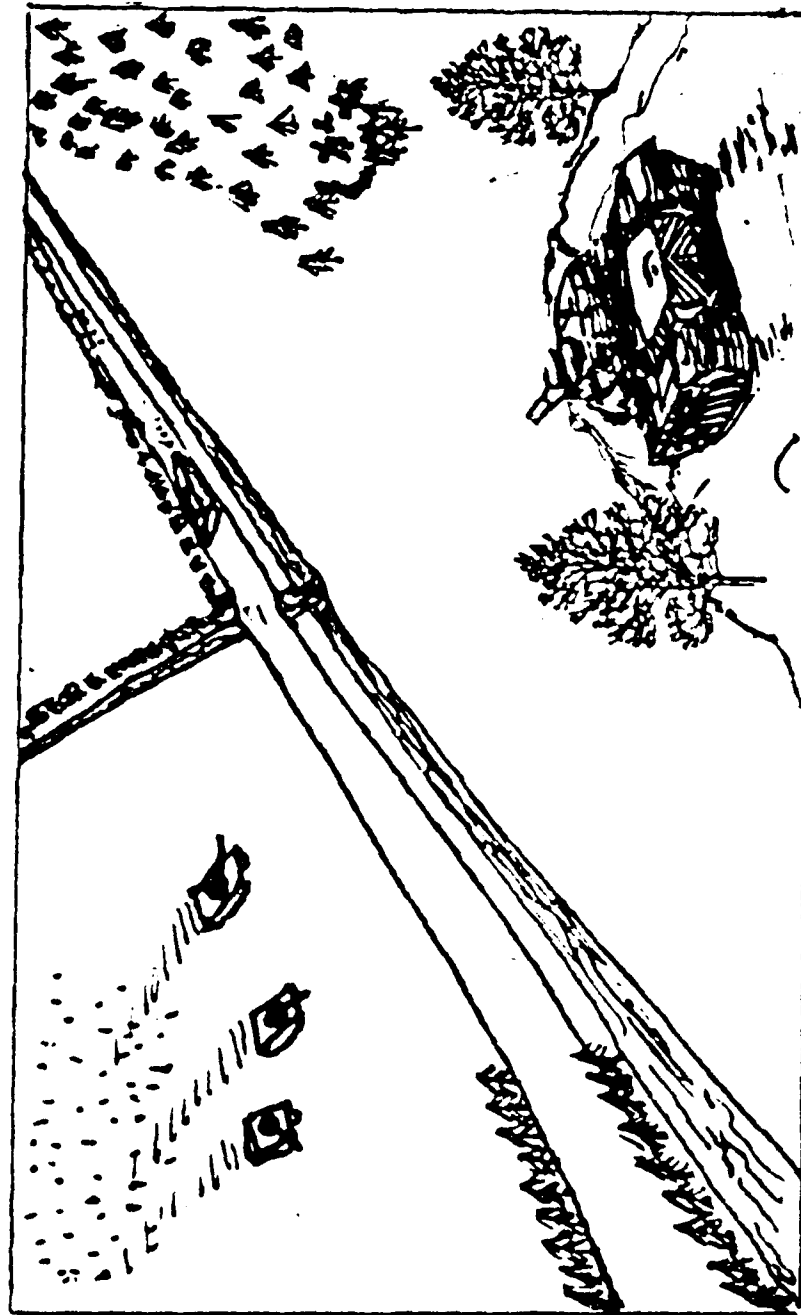
The BDRM mounting SAGGER and the 152mm howitzers are the DANGEROUS threats because they:

- Can kill you
- Have not seen you, or
- Not preparing to engage you

The troops and machine guns are the LEAST DANGEROUS threats because they:

- Cannot kill you, but
- Can observe and report your position

SCENARIO 10



THE SITUATION

- You are well concealed in a turret down, deliberate defensive position.
- M60A3 is fully operational.
- A platoon of T-72s is approaching, direct front, range 1500 meters. The center T-72 is pointed in your direction, but he cannot hit you.
- Behind the tanks is a large group of troops.
- On your right, at 500 meters, is an SPC-9, It is set up and has a clear shot at you through the trees.
- Behind the SPC-9 at 1000 meters, is a BMP mounting SAGGER. The BMP is moving to your direct front.

In this situation, which target(s) is (are):

MOST DANGEROUS?

DANGEROUS?

LEAST DANGEROUS?

SCENARIO 10 ANSWER

Your answers should have been:

MOST DANGEROUS

- SPG-9

DANGEROUS

- T-72s (all 3)
- BMP mounting SAGGER

LEAST DANGEROUS

- Troops

The SPG-9 is the MOST DANGEROUS threat because it:

- Can kill you
- Can see you
- Is preparing to engage you

The T-72s and the BMP are DANGEROUS threats because they:

- Can kill you
- Have not seen you, or
- Not preparing to engage you

The troops are LEAST DANGEROUS because they:

- Can not kill you, but
- Can observe and report your position

The M60A3 Fire Command Booklets are
prototype training documents. For
comments or questions contact:

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